STATE OF ILLINOIS

ILLINOIS COMMERCE COMMISSION

COMMONWEALTH EDISON COMPANY,	)	
	)	
Approval of the Energy Efficiency and	)	Docket No. 07-0540
Demand-Response Plan Pursuant to Section 12-103(f) of	)	
the Public Utilities Act	)	

Direct Testimony of

FRANK S. HUNTOWSKI

Director of The NorthBridge Group

On Behalf of Commonwealth Edison Company

November 15, 2007

ComEd Ex. 8.0

TABLE OF CONTENTS

I. Introduction and Purpose

A. Identification of Witness

Q. Please state your name and business address.

A. Frank S. Huntowski, The NorthBridge Group, 30 Monument Square, Concord, Massachusetts 01742.

Q. Please state your current position and the name of your employer.

A. I am a director at The NorthBridge Group, a firm specializing in economic and strategic consulting for the electric and natural gas industries, including regulated utilities and other parties interested in the competitive segments of these industries.

B. Purpose of Testimony

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the methodology used to calculate the wholesale electric price forecast for the years in Commonwealth Edison Company's ("ComEd") 2008-2010 Energy Efficiency and Demand Response Plan ("Plan"). The forecast data are used as part of calculations described in the direct testimony of two ComEd witnesses in this docket: Paul R. Crumrine (ComEd Ex. 5.0) and Val R. Jensen (ComEd Ex. 6.0).

C. Identification of Exhibits

Q. What attachments are attached to and incorporated in your direct testimony?

A. I have attached the following exhibits to my testimony:

Exhibit 8.1: Curriculum Vitae of Frank S. Huntowski.

Exhibit 8.2: Summary of Electric Price Forecast.

D. Background and Experience

Q. Please summarize your educational background and professional experience.

A. I received a M.S. in Management from the Massachusetts Institute of Technology and a B.S. in Engineering and a B.S. in Economics from the University of Pennsylvania. I was one of the initial members of The NorthBridge Group when the firm was founded in 1992. Before joining NorthBridge, I worked as a consultant for Putnam, Hayes & Bartlett and as an investment banker for Smith Barney, Harris Upham & Co.

Q. Please explain your work experience that is pertinent to your testimony in this proceeding.

A. I have worked for over 15 years as an advisor in the electric and natural gas industries. During this time period, I have assisted electric utilities, natural gas pipelines, independent power producers, and electric and gas marketers in a range of areas, including competitive market pricing, asset valuation, risk management, and restructuring strategy. As part of my work, I have evaluated pricing dynamics and resulting electric market prices in several regions throughout the country, including the PJM Interconnection, L.L.C. ("PJM"), New England Power Pool ("NEPOOL"), New York Power Pool ("NYPP"), East Central Area Reliability Coordination Agreement ("ECAR"), Mid-America Interconnected Network ("MAIN"), Western Systems Coordinating Council ("WSCC"), and Electric Reliability Council of Texas ("ERCOT"). I previously testified before the Illinois Commerce Commission ("ICC" or "Commission") in Docket Nos. 99-0171 and 00-0259. A copy of my curriculum vitae is attached as ComEd Exhibit 8.1.

II. Price Forecast Methodology

Q. Please describe the methodology used to forecast prices for ComEd's Plan.

A. To forecast future electricity prices, The NorthBridge Group uses a combination of forward market data, historical market data, and fundamental models. The price forecast for the first three years is based primarily upon forward market data and then prices are assumed to move toward a long-term equilibrium price over time. The long-term equilibrium price is determined using a fundamental model – that is, a model that examines the underlying drivers of electricity prices (*e.g.*, supply and demand, gas prices and carbon dioxide ("CO_2") prices) to develop a forecast. The path toward this long-term price is developed using both a fundamental model and historical market data.

Q. What is the source of the forward market data?

A. The forward market data underlying this forecast comes from the New York Mercantile Exchange ("NYMEX"). Monthly contract prices for the Northern Illinois Hub for both peak and wrap products are available for delivery dates through 2010, with prices being updated on a daily basis. The peak product is for electricity delivery during the 16 hours between 7:00 a.m. and 11:00 p.m. on weekdays, while the wrap product covers delivery during all other hours, including weekend peak periods. For this forecast, NorthBridge utilized market data for the trade date of September 13, 2007.

Q. Has the forward market data changed since September 13, 2007?

A. Yes. As shown in ComEd Exhibit 8.2, forward market prices increased by about 8% between mid-September and mid-November, and these prices will continue to move up and down on a daily basis. Similar to stock price movements, these forward price movements are based on changing expectations related to a range of factors. Our price

forecast also changes over time, both due to these movements in forward prices and due to changes related to the longer-term drivers of the electricity price. Because there is a significant amount of uncertainty related to these drivers and future electric prices, actual prices could turn out to be very different than forward prices and forecasts at any point in time.

Q. How do you determine the long-term equilibrium price?

A. The long-term equilibrium price is the price necessary to attract new entry when such entry is required to maintain adequate reserve margins. In equilibrium, NorthBridge assumes that the most economic generation technology will come on-line and that market prices for energy, capacity, and ancillary services are just sufficient to compensate these units for their all-in costs. All-in costs include capital costs, required return on capital, fuel, fixed and variable operations and maintenance ("O&M") costs, and environmental costs. Generally, equilibrium occurs when the regional reserve margin is on the order of 15%. Once equilibrium is reached, we assume that prices remain stable at this level and increase based upon general inflation adjusted for technological advancements.

Q. What are the key underlying factors that influence the path toward this long-term equilibrium price?

A. There are a broad range of factors, but the three primary drivers are changes in supply and demand, gas prices, and CO_2 prices. Therefore, NorthBridge examines each of these drivers over time and uses a fundamental model to translate changes in these factors into changes in the electric price.

Q. How do you incorporate changes in supply and demand into the forecast?

A. Increases in demand put upward pressure on prices, while increases in supply create downward pressure on prices. We base our estimates of regional demand growth on the 2007 PJM Load Report and our estimates of specific new generation resource construction are based on an analysis of planned projects over time. Furthermore, estimates of forecasted generation retirements are based on the PJM Retirement Queue. We determined the joint impact of these demand growth and supply changes on the trajectory of energy prices between the market and equilibrium periods based on regression analyses of the historical relationships between PJM energy prices and changes in load.

Q. How do you incorporate gas prices into the forecast?

A. Gas prices have a direct impact on energy prices through the dispatch of gas-fueled generation, which will be the marginal, price-setting unit for a portion of the time in the PJM ComEd Zone. Our gas price forecast is based on forward market prices through 2012, followed by a downward trend through 2014, with inflationary increases thereafter. The gas market data is based on monthly Henry Hub futures traded on NYMEX as of a September 13, 2007 trade date for the period 2008-2012. We translate these changes in the gas price forecast into changes in electric prices based upon an analysis of the historical relationship between electric and gas forward prices.

Q. How are CO_2 prices incorporated into the forecast?

A. There are a number of climate change proposals being discussed in Congress, and the eventual CO_2 price will be a function of a range of factors including the specifics of any climate change bill that is adopted. For purposes of the CO_2 scenario in our forecast, we utilized the CO_2 price cap specified in the Bingaman-Specter Bill (also known as the Low

Carbon Economy Act). This Bill establishes a national CO_2 program as of 2012, and sets the initial year CO_2 price cap at $12/tonne, increasing at 5% plus inflation each year thereafter. The impact of these CO_2 prices on the electric price forecast is a function of the mix of marginal, price-setting generation in the PJM ComEd Zone. For example, a coal unit emits roughly 205 pounds of CO_2 for every million British thermal units ("MMBtu") of coal it burns, while a gas unit only emits about 117 lbs of CO_2 per MMBtu. The more coal on the margin, the larger the impact on a region's electric price the CO_2 price will have. For both peak and off-peak periods, we have forecasted the mix of marginal gas and coal generation and the expected marginal heat rates. We have translated these into marginal peak and off-peak CO_2 emission rates. These rates change over time as the mix of coal and gas changes in the region. The product of the marginal emission rate in tons and the CO_2 price is the CO_2 electric adder in a given year.

III. Resulting Price Forecast

Q. Please describe the results of your forecasting methodology.

A. The electricity price forecast developed through the calculations outlined above is shown in ComEd Exhibit 8.2. The forecast is broken down into energy prices and capacity prices for different time periods, both with and without a CO_2 component.

Q. Please describe the different time periods in the forecast.

A. The energy price is broken down into an on-peak price (16 hours per day starting at 7:00 a.m. for each weekday), weekend price (16 hours per day for each weekend day), and off-peak price for all other hours. The wrap price and around-the-clock ("ATC") price are also shown. The wrap price is simply a weighted average of the weekend price and the off-peak price, and the ATC price is an average across all time periods.

Q. Please describe the capacity price.

A. In PJM, capacity, or the ability to generate a certain number of megawatts, is sold as a separate product from energy. The price for this product is determined periodically based upon an auction process. The capacity price in my forecast reflects previous capacity auction prices through May 31, 2010 and a projection of future capacity prices based upon a similar auction process and changes in supply and demand.

IV. Use of Price Forecast Data by Other ComEd Witnesses

Q. Which analyses in this proceeding incorporate your price forecast data?

A. The price forecast data are used by ComEd witness Mr. Crumrine to assist in developing the "market value approach" to estimating the amounts paid for supply by ComEd customers who take their supply of electricity from a Retail Electric Supplier ("RES"). (*See* ComEd Ex. 5.0.) The data are also used by ComEd witness Mr. Jensen in calculating the energy savings values under the Total Resource Cost test, which determines the cost-effectiveness of ComEd's proposed energy efficiency and demand response measures. (*See* ComEd Ex. 6.0.)

Q. Does this conclude your direct testimony?

A. Yes.

FRANK S. HUNTOWSKI **Director, The NorthBridge Group**

Frank Huntowski has advised both electric and gas companies on a range of strategic and economic issues, particularly on matters susceptible to rigorous quantitative analysis including asset valuation, risk management, competitive pricing, acquisitions and divestitures, and restructuring strategy. His work has included the following:

- For several electric companies in different regions of the country, analyzed merger and acquisition strategies and evaluated asset/power sale opportunities.
- For utilities in the Midwest and South, evaluated the profitability, risks, and supply portfolio implications of alternative default service offerings to retail customers.
- Working with a large Midwest electric company, valued regulated and unregulated assets and assessed risk exposure as part of a completed merger.
- For several electric companies throughout the country, forecasted competitive market prices, estimated price uncertainty, valued generation assets, and estimated appropriate cost of capital for different types of generating assets.
- For a Southern electric company, developed and evaluated alternative restructuring plans, assisted in the development of rules during the transition to competition, evaluated competitive risk exposure associated with generation and retail positions after the start of competition, and recommended hedging alternatives.
- For a large regional electric and gas company, valued acquisition targets, determined market price risk exposure of target's unregulated assets, evaluated target's regulated businesses, recommended offer price ranges for several acquisitions, and participated in acquisition due diligence process.
- On behalf of a Northeastern utility, developed pricing alternatives and helped the utility successfully negotiate the buyout of several uneconomic non-utility generator contracts.
- For a Midwestern utility, evaluated range of procurement alternatives for the end of a rate freeze period, assessed risk and rate impacts of these alternatives, and assisted in the development and filing of comprehensive procurement plan.
- For a large Western utility, developed alternative structures for an asset sale transaction, analyzed proposals of potential purchasers, and evaluated potential negotiating options.
- For a large regional generation company, evaluated range of alternatives for a project-financed generation asset in the Northeast and recommended the transfer of the asset to lenders.
- Working with a variety of electric and gas utilities, assessed the potential risks and financial implications of industry restructuring, including organization of

competitive markets, power pool operations, system operator procedures, balancing, and dispatch.

- Working with a large natural gas pipeline, evaluated the threats and opportunities associated with the unbundling of services in the natural gas industry.

- On behalf of several utilities, evaluated the benefits of delaying major capital investments when benefits and costs were highly uncertain.

- For a large Eastern utility, analyzed electric rates and shareholder value under alternative ratemaking treatments of a major power sale.

- For several utilities with retail choice, evaluated the profits and risks associated with alternative retail pricing structures and shopping credit / transition charge calculation methodologies.

- Working closely with a major natural gas services company, helped develop and market several successful new products.

- For the Electric Power Research Institute (EPRI), conducted numerous seminars related to market price forecasting and asset valuation and published "Utilizing Option Valuation Theory to Analyze Generating Plant Investment and Retirement Decisions".

- On behalf of a Midwestern utility, led workshop discussions and testified before the Illinois Commerce Commission on matters related to the development of a market index for purposes of determining a market-based commodity charge and a competition transition charge.

- For a new generation owner in California, evaluated the interaction between reliability must-run (RMR) contracts and prices in the California market and authored "RMR Contracts and the California PX Market" and "Pre-Dispatch of Energy in the California PX Market".

Before joining NorthBridge, Mr. Huntowski did similar work with Putnam, Hayes & Bartlett. Prior to that, he worked in the investment banking division of Smith Barney, Harris Upham & Co., specializing in tax-exempt securities. He received a B.S. in computer engineering and a B.S. in economics from the University of Pennsylvania and an M.S. in management from the Sloan School, Massachusetts Institute of Technology.

Summary of Electric Price Forecast

ComEd Zone Annual Prices Based on 9/13/07 Market Data

Year	Peak Energy ($/MWh)	Weekend Energy ($/MWh)	Off Peak Energy ($/MWh)	Wrap Energy ($/MWh)	ATC Energy ($/MWh)	Capacity ($/kw-yr)
2008	61.57	39.58	27.33	31.78	45.69	30.0
2009	63.60	41.72	28.80	33.50	47.56	38.7

ComEd Zone Annual Prices Based on 11/13/07 Market Data

Year	Peak Energy ($/MWh)	Weekend Energy ($/MWh)	Off Peak Energy ($/MWh)	Wrap Energy ($/MWh)	ATC Energy ($/MWh)	Capacity ($/kw-yr)
2008	66.11	43.95	30.34	35.29	49.68	30.0
2009	67.88	45.77	31.60	36.75	51.29	38.7

ComEd Zone Monthly Price Forecast – No National Carbon Program
Based on 9/13/07 Market Data

Year	Month	Peak Energy ($/MWh)	Weekend Energy ($/MWh)	OffPeak Energy ($/MWh)	Wrap Energy ($/MWh)	ATC Energy ($/MWh)	Capacity $/Kw-yr	CO2 $/tCO2
2008	1	62.13	45.52	33.11	37.62	49.07	14.9	0.00
2008	2	60.29	46.10	33.97	38.38	48.61	14.9	0.00
2008	3	56.14	41.13	27.69	32.58	43.58	14.9	0.00
2008	4	59.62	39.04	26.29	30.92	44.32	14.9	0.00
2008	5	56.96	34.57	23.27	27.38	41.19	14.9	0.00
2008	6	60.13	35.37	23.21	27.63	42.81	40.9	0.00
2008	7	78.46	43.92	30.34	35.28	55.44	40.9	0.00
2008	8	80.04	43.23	29.86	34.72	55.89	40.9	0.00
2008	9	59.17	34.40	23.76	27.63	42.36	40.9	0.00
2008	10	55.62	35.41	24.46	28.44	41.13	40.9	0.00
2008	11	54.57	36.93	25.51	29.66	41.29	40.9	0.00
2008	12	55.68	39.32	26.48	31.15	42.60	40.9	0.00
2009	1	64.18	47.98	34.89	39.65	51.11	40.9	0.00
2009	2	62.28	48.60	35.80	40.45	50.65	40.9	0.00
2009	3	58.00	43.35	29.19	34.34	45.39	40.9	0.00
2009	4	61.58	41.15	27.71	32.60	46.13	40.9	0.00
2009	5	58.84	36.44	24.53	28.86	42.86	40.9	0.00
2009	6	62.12	37.28	24.46	29.12	44.53	37.2	0.00
2009	7	81.05	46.30	31.98	37.19	57.67	37.2	0.00
2009	8	82.68	45.56	31.47	36.60	58.12	37.2	0.00
2009	9	61.12	36.26	25.05	29.12	44.07	37.2	0.00
2009	10	57.46	37.32	25.78	29.98	42.81	37.2	0.00
2009	11	56.37	38.92	26.89	31.26	42.99	37.2	0.00
2009	12	57.52	41.45	27.91	32.83	44.36	37.2	0.00
2010	1	63.83	49.77	36.20	41.13	51.73	37.2	0.00
2010	2	61.94	50.41	37.14	41.96	51.29	37.2	0.00
2010	3	57.68	44.97	30.27	35.62	45.92	37.2	0.00
2010	4	61.25	42.69	28.74	33.81	46.62	37.2	0.00
2010	5	58.52	37.79	25.45	29.94	43.28	37.2	0.00
2010	6	61.77	38.67	25.38	30.21	44.95	47.5	0.00
2010	7	80.60	48.02	33.17	38.57	58.20	47.5	0.00
2010	8	82.23	47.26	32.65	37.96	58.63	47.5	0.00
2010	9	60.79	37.61	25.98	30.21	44.49	47.5	0.00
2010	10	57.14	38.72	26.74	31.10	43.26	47.5	0.00
2010	11	56.06	40.38	27.89	32.43	43.47	47.5	0.00
2010	12	57.20	43.00	28.95	34.06	44.86	47.5	0.00
2011	1	64.34	50.96	37.06	42.11	52.49	47.5	0.00
2011	2	62.44	51.61	38.02	42.96	52.06	47.5	0.00
2011	3	58.14	46.04	31.00	36.47	46.59	47.5	0.00
2011	4	61.74	43.70	29.42	34.62	47.28	47.5	0.00
2011	5	58.99	38.70	26.05	30.65	43.88	47.5	0.00
2011	6	62.27	39.59	25.98	30.93	45.57	51.1	0.00
2011	7	81.25	49.17	33.96	39.49	58.99	51.1	0.00
2011	8	82.89	48.39	33.42	38.87	59.43	51.1	0.00
2011	9	61.28	38.51	26.60	30.93	45.10	51.1	0.00
2011	10	57.60	39.64	27.38	31.84	43.87	51.1	0.00
2011	11	56.52	41.34	28.55	33.20	44.09	51.1	0.00
2011	12	57.66	44.02	29.64	34.87	45.51	51.1	0.00
2012	1	65.00	52.24	37.99	43.17	53.37	51.1	0.00

2012	2	63.08	52.91	38.98	44.05	52.94	51.1	0.00
2012	3	58.74	47.20	31.78	37.39	47.36	51.1	0.00
2012	4	62.38	44.81	30.17	35.49	48.05	51.1	0.00
2012	5	59.60	39.67	26.71	31.42	44.58	51.1	0.00
2012	6	62.91	40.59	26.64	31.71	46.28	54.8	0.00
2012	7	82.09	50.41	34.82	40.49	59.92	54.8	0.00
2012	8	83.75	49.61	34.27	39.85	60.35	54.8	0.00
2012	9	61.91	39.48	27.27	31.71	45.81	54.8	0.00
2012	10	58.20	40.64	28.07	32.64	44.58	54.8	0.00
2012	11	57.10	42.38	29.27	34.04	44.81	54.8	0.00
2012	12	58.25	45.13	30.39	35.75	46.26	54.8	0.00
2013	1	62.95	52.35	38.07	43.27	52.46	54.8	0.00
2013	2	61.09	53.02	39.06	44.14	52.06	54.8	0.00
2013	3	56.89	47.30	31.84	37.46	46.54	54.8	0.00
2013	4	60.41	44.90	30.23	35.57	47.17	54.8	0.00
2013	5	57.72	39.75	26.77	31.49	43.74	54.8	0.00
2013	6	60.93	40.67	26.69	31.78	45.39	58.4	0.00
2013	7	79.50	50.52	34.89	40.57	58.75	58.4	0.00
2013	8	81.10	49.71	34.34	39.93	59.16	58.4	0.00
2013	9	59.96	39.56	27.33	31.78	44.94	58.4	0.00
2013	10	56.36	40.72	28.13	32.71	43.75	58.4	0.00
2013	11	55.30	42.47	29.34	34.11	44.00	58.4	0.00
2013	12	56.42	45.23	30.45	35.82	45.44	58.4	0.00
2014	1	59.39	50.78	36.93	41.97	50.10	58.4	0.00
2014	2	57.63	51.44	37.89	42.82	49.74	58.4	0.00
2014	3	53.67	45.88	30.89	36.34	44.43	58.4	0.00
2014	4	56.99	43.56	29.33	34.50	45.00	58.4	0.00
2014	5	54.45	38.57	25.96	30.55	41.71	58.4	0.00
2014	6	57.48	39.46	25.89	30.83	43.27	59.0	0.00
2014	7	75.00	49.00	33.85	39.36	56.00	59.0	0.00
2014	8	76.51	48.23	33.31	38.74	56.38	59.0	0.00
2014	9	56.56	38.38	26.51	30.83	42.84	59.0	0.00
2014	10	53.17	39.50	27.29	31.73	41.74	59.0	0.00
2014	11	52.16	41.20	28.46	33.09	42.00	59.0	0.00
2014	12	53.22	43.87	29.54	34.75	43.38	59.0	0.00
2015	1	61.02	52.89	38.47	43.71	51.79	59.0	0.00
2015	2	59.22	53.57	39.47	44.59	51.42	59.0	0.00
2015	3	55.14	47.79	32.17	37.85	45.93	59.0	0.00
2015	4	58.55	45.36	30.54	35.93	46.50	59.0	0.00
2015	5	55.94	40.16	27.04	31.81	43.08	59.0	0.00
2015	6	59.06	41.09	26.97	32.10	44.69	59.6	0.00
2015	7	77.06	51.04	35.25	40.99	57.84	59.6	0.00
2015	8	78.61	50.23	34.69	40.34	58.22	59.6	0.00
2015	9	58.11	39.97	27.61	32.10	44.25	59.6	0.00
2015	10	54.63	41.14	28.42	33.05	43.13	59.6	0.00
2015	11	53.60	42.91	29.64	34.46	43.40	59.6	0.00
2015	12	54.68	45.69	30.76	36.19	44.83	59.6	0.00
2016	1	61.63	53.68	39.04	44.37	52.43	59.6	0.00
2016	2	59.81	54.37	40.06	45.26	52.06	59.6	0.00
2016	3	55.69	48.50	32.66	38.42	46.49	59.6	0.00
2016	4	59.14	46.04	31.00	36.47	47.06	59.6	0.00
2016	5	56.50	40.77	27.45	32.29	43.60	59.6	0.00
2016	6	59.65	41.71	27.37	32.59	45.22	60.2	0.00
2016	7	77.83	51.80	35.78	41.61	58.52	60.2	0.00
2016	8	79.40	50.98	35.21	40.95	58.90	60.2	0.00
2016	9	58.70	40.57	28.02	32.59	44.78	60.2	0.00

2016	10	55.18	41.76	28.85	33.54	43.64	60.2	0.00
2016	11	54.13	43.55	30.08	34.98	43.93	60.2	0.00
2016	12	55.23	46.38	31.22	36.73	45.37	60.2	0.00
2017	1	62.25	54.49	39.63	45.03	53.07	60.2	0.00
2017	2	60.41	55.19	40.66	45.94	52.70	60.2	0.00
2017	3	56.25	49.23	33.15	38.99	47.05	60.2	0.00
2017	4	59.73	46.74	31.47	37.02	47.62	60.2	0.00
2017	5	57.07	41.38	27.86	32.78	44.12	60.2	0.00
2017	6	60.24	42.34	27.78	33.07	45.76	60.8	0.00
2017	7	78.61	52.58	36.32	42.23	59.22	60.8	0.00
2017	8	80.19	51.74	35.74	41.56	59.60	60.8	0.00
2017	9	59.28	41.18	28.44	33.07	45.31	60.8	0.00
2017	10	55.73	42.39	29.28	34.05	44.17	60.8	0.00
2017	11	54.67	44.20	30.53	35.51	44.46	60.8	0.00
2017	12	55.78	47.07	31.69	37.29	45.92	60.8	0.00
2018	1	62.87	55.31	40.22	45.71	53.72	60.8	0.00
2018	2	61.01	56.02	41.27	46.63	53.35	60.8	0.00
2018	3	56.81	49.97	33.64	39.58	47.63	60.8	0.00
2018	4	60.33	47.44	31.94	37.57	48.20	60.8	0.00
2018	5	57.64	42.00	28.28	33.27	44.65	60.8	0.00
2018	6	60.85	42.97	28.20	33.57	46.31	61.4	0.00
2018	7	79.39	53.37	36.86	42.87	59.92	61.4	0.00
2018	8	81.00	52.52	36.28	42.18	60.31	61.4	0.00
2018	9	59.88	41.80	28.87	33.57	45.85	61.4	0.00
2018	10	56.28	43.02	29.72	34.56	44.70	61.4	0.00
2018	11	55.22	44.87	30.99	36.04	45.00	61.4	0.00
2018	12	56.34	47.78	32.17	37.85	46.48	61.4	0.00
2019	1	63.50	56.14	40.83	46.39	54.38	61.4	0.00
2019	2	61.62	56.86	41.89	47.33	54.00	61.4	0.00
2019	3	57.38	50.72	34.15	40.17	48.21	61.4	0.00
2019	4	60.93	48.15	32.42	38.14	48.78	61.4	0.00
2019	5	58.22	42.63	28.70	33.77	45.18	61.4	0.00
2019	6	61.46	43.61	28.62	34.07	46.86	62.0	0.00
2019	7	80.19	54.17	37.42	43.51	60.64	62.0	0.00
2019	8	81.81	53.31	36.82	42.82	61.03	62.0	0.00
2019	9	60.47	42.42	29.30	34.07	46.40	62.0	0.00
2019	10	56.85	43.67	30.16	35.07	45.24	62.0	0.00
2019	11	55.77	45.54	31.46	36.58	45.54	62.0	0.00
2019	12	56.90	48.50	32.65	38.41	47.05	62.0	0.00
2020	1	64.13	56.98	41.44	47.09	55.05	62.0	0.00
2020	2	62.24	57.71	42.52	48.04	54.67	62.0	0.00
2020	3	57.95	51.48	34.66	40.78	48.80	62.0	0.00
2020	4	61.54	48.87	32.90	38.71	49.37	62.0	0.00
2020	5	58.80	43.27	29.13	34.27	45.73	62.0	0.00
2020	6	62.07	44.27	29.05	34.59	47.42	62.6	0.00
2020	7	80.99	54.98	37.98	44.16	61.36	62.6	0.00
2020	8	82.62	54.11	37.38	43.46	61.75	62.6	0.00
2020	9	61.08	43.06	29.74	34.59	46.96	62.6	0.00
2020	10	57.42	44.32	30.62	35.60	45.79	62.6	0.00
2020	11	56.33	46.22	31.93	37.13	46.10	62.6	0.00
2020	12	57.47	49.22	33.14	38.99	47.62	62.6	0.00
2021	1	64.77	57.83	42.06	47.80	55.72	62.6	0.00
2021	2	62.86	58.58	43.15	48.76	55.35	62.6	0.00
2021	3	58.53	52.25	35.18	41.39	49.39	62.6	0.00
2021	4	62.16	49.60	33.40	39.29	49.97	62.6	0.00
2021	5	59.39	43.92	29.57	34.79	46.27	62.6	0.00

2021	6	62.69	44.93	29.49	35.10	47.99	63.2	0.00
2021	7	81.80	55.80	38.55	44.82	62.09	63.2	0.00
2021	8	83.45	54.92	37.94	44.11	62.48	63.2	0.00
2021	9	61.69	43.70	30.19	35.10	47.52	63.2	0.00
2021	10	57.99	44.99	31.08	36.13	46.34	63.2	0.00
2021	11	56.89	46.92	32.41	37.68	46.66	63.2	0.00
2021	12	58.05	49.96	33.64	39.57	48.20	63.2	0.00
2022	1	65.42	58.70	42.69	48.51	56.41	63.2	0.00
2022	2	63.49	59.45	43.80	49.49	56.03	63.2	0.00
2022	3	59.12	53.04	35.71	42.01	50.00	63.2	0.00
2022	4	62.78	50.35	33.90	39.88	50.57	63.2	0.00
2022	5	59.98	44.58	30.01	35.31	46.83	63.2	0.00
2022	6	63.32	45.61	29.93	35.63	48.56	63.9	0.00
2022	7	82.62	56.64	39.13	45.50	62.83	63.9	0.00
2022	8	84.29	55.74	38.51	44.77	63.23	63.9	0.00
2022	9	62.31	44.36	30.64	35.63	48.09	63.9	0.00
2022	10	58.57	45.66	31.54	36.68	46.90	63.9	0.00
2022	11	57.46	47.62	32.89	38.25	47.22	63.9	0.00
2022	12	58.63	50.71	34.14	40.17	48.79	63.9	0.00
2023	1	66.08	59.58	43.33	49.24	57.10	63.9	0.00
2023	2	64.12	60.35	44.46	50.24	56.72	63.9	0.00
2023	3	59.71	53.83	36.24	42.64	50.61	63.9	0.00
2023	4	63.40	51.10	34.41	40.48	51.18	63.9	0.00
2023	5	60.58	45.25	30.46	35.84	47.39	63.9	0.00
2023	6	63.95	46.29	30.38	36.16	49.14	64.5	0.00
2023	7	83.44	57.49	39.71	46.18	63.58	64.5	0.00
2023	8	85.13	56.58	39.08	45.45	63.98	64.5	0.00
2023	9	62.93	45.03	31.10	36.16	48.66	64.5	0.00
2023	10	59.16	46.35	32.01	37.23	47.47	64.5	0.00
2023	11	58.04	48.33	33.39	38.82	47.80	64.5	0.00
2023	12	59.21	51.47	34.65	40.77	49.38	64.5	0.00
2024	1	66.74	60.48	43.98	49.98	57.80	64.5	0.00
2024	2	64.76	61.25	45.13	50.99	57.42	64.5	0.00
2024	3	60.31	54.64	36.79	43.28	51.23	64.5	0.00
2024	4	64.04	51.87	34.92	41.08	51.80	64.5	0.00
2024	5	61.18	45.92	30.92	36.38	47.96	64.5	0.00
2024	6	64.59	46.99	30.83	36.71	49.73	65.2	0.00
2024	7	84.28	58.35	40.31	46.87	64.34	65.2	0.00
2024	8	85.98	57.43	39.67	46.13	64.74	65.2	0.00
2024	9	63.56	45.70	31.57	36.71	49.25	65.2	0.00
2024	10	59.75	47.04	32.49	37.78	48.04	65.2	0.00
2024	11	58.62	49.06	33.89	39.41	48.38	65.2	0.00
2024	12	59.81	52.24	35.17	41.38	49.99	65.2	0.00
2025	1	67.40	61.38	44.64	50.73	58.52	65.2	0.00
2025	2	65.41	62.17	45.80	51.75	58.13	65.2	0.00
2025	3	60.91	55.46	37.34	43.93	51.86	65.2	0.00
2025	4	64.68	52.65	35.45	41.70	52.43	65.2	0.00
2025	5	61.80	46.61	31.38	36.92	48.54	65.2	0.00
2025	6	65.24	47.69	31.30	37.26	50.32	65.8	0.00
2025	7	85.12	59.23	40.91	47.57	65.11	65.8	0.00
2025	8	86.84	58.29	40.26	46.82	65.51	65.8	0.00
2025	9	64.19	46.39	32.04	37.26	49.84	65.8	0.00
2025	10	60.34	47.75	32.98	38.35	48.62	65.8	0.00
2025	11	59.21	49.80	34.40	40.00	48.97	65.8	0.00
2025	12	60.40	53.03	35.70	42.00	50.60	65.8	0.00
2026	1	68.08	62.30	45.31	51.49	59.24	65.8	0.00

2026	2	66.07	63.10	46.49	52.53	58.85	65.8	0.00
2026	3	61.52	56.29	37.90	44.59	52.49	65.8	0.00
2026	4	65.33	53.44	35.98	42.33	53.07	65.8	0.00
2026	5	62.41	47.31	31.85	37.47	49.12	65.8	0.00
2026	6	65.89	48.41	31.77	37.82	50.93	66.5	0.00
2026	7	85.97	60.12	41.53	48.29	65.89	66.5	0.00
2026	8	87.71	59.16	40.87	47.52	66.29	66.5	0.00
2026	9	64.84	47.08	32.52	37.82	50.43	66.5	0.00
2026	10	60.95	48.46	33.48	38.93	49.21	66.5	0.00
2026	11	59.80	50.54	34.91	40.60	49.56	66.5	0.00
2026	12	61.01	53.82	36.24	42.63	51.21	66.5	0.00
2027	1	68.76	63.24	45.99	52.26	59.97	66.5	0.00
2027	2	66.73	64.05	47.19	53.32	59.58	66.5	0.00
2027	3	62.14	57.13	38.47	45.25	53.14	66.5	0.00
2027	4	65.98	54.24	36.52	42.96	53.71	66.5	0.00
2027	5	63.04	48.02	32.33	38.04	49.71	66.5	0.00
2027	6	66.55	49.13	32.24	38.38	51.54	67.1	0.00
2027	7	86.83	61.02	42.15	49.01	66.67	67.1	0.00
2027	8	88.58	60.05	41.48	48.23	67.08	67.1	0.00
2027	9	65.48	47.79	33.01	38.38	51.04	67.1	0.00
2027	10	61.56	49.19	33.98	39.51	49.81	67.1	0.00
2027	11	60.40	51.30	35.44	41.21	50.17	67.1	0.00
2027	12	61.62	54.63	36.78	43.27	51.84	67.1	0.00

ComEd Zone Monthly Price Forecast –National Carbon Program by 2012
Based on 9/13/07 Market Data

Year	Month	Peak Energy ($/MWh)	Weekend Energy ($/MWh)	OffPeak Energy ($/MWh)	Wrap Energy ($/MWh)	ATC Energy ($/MWh)	Capacity $/Kw-yr	CO2 $/tCO2
2008	1	62.13	45.52	33.11	37.62	49.07	14.9	0.00
2008	2	60.29	46.10	33.97	38.38	48.61	14.9	0.00
2008	3	56.14	41.13	27.69	32.58	43.58	14.9	0.00
2008	4	59.62	39.04	26.29	30.92	44.32	14.9	0.00
2008	5	56.96	34.57	23.27	27.38	41.19	14.9	0.00
2008	6	60.13	35.37	23.21	27.63	42.81	40.9	0.00
2008	7	78.46	43.92	30.34	35.28	55.44	40.9	0.00
2008	8	80.04	43.23	29.86	34.72	55.89	40.9	0.00
2008	9	59.17	34.40	23.76	27.63	42.36	40.9	0.00
2008	10	55.62	35.41	24.46	28.44	41.13	40.9	0.00
2008	11	54.57	36.93	25.51	29.66	41.29	40.9	0.00
2008	12	55.68	39.32	26.48	31.15	42.60	40.9	0.00
2009	1	64.18	47.98	34.89	39.65	51.11	40.9	0.00
2009	2	62.28	48.60	35.80	40.45	50.65	40.9	0.00
2009	3	58.00	43.35	29.19	34.34	45.39	40.9	0.00
2009	4	61.58	41.15	27.71	32.60	46.13	40.9	0.00
2009	5	58.84	36.44	24.53	28.86	42.86	40.9	0.00
2009	6	62.12	37.28	24.46	29.12	44.53	37.2	0.00
2009	7	81.05	46.30	31.98	37.19	57.67	37.2	0.00
2009	8	82.68	45.56	31.47	36.60	58.12	37.2	0.00
2009	9	61.12	36.26	25.05	29.12	44.07	37.2	0.00
2009	10	57.46	37.32	25.78	29.98	42.81	37.2	0.00
2009	11	56.37	38.92	26.89	31.26	42.99	37.2	0.00
2009	12	57.52	41.45	27.91	32.83	44.36	37.2	0.00
2010	1	63.83	49.77	36.20	41.13	51.73	37.2	0.00
2010	2	61.94	50.41	37.14	41.96	51.29	37.2	0.00
2010	3	57.68	44.97	30.27	35.62	45.92	37.2	0.00
2010	4	61.25	42.69	28.74	33.81	46.62	37.2	0.00
2010	5	58.52	37.79	25.45	29.94	43.28	37.2	0.00
2010	6	61.77	38.67	25.38	30.21	44.95	47.5	0.00
2010	7	80.60	48.02	33.17	38.57	58.20	47.5	0.00
2010	8	82.23	47.26	32.65	37.96	58.63	47.5	0.00
2010	9	60.79	37.61	25.98	30.21	44.49	47.5	0.00
2010	10	57.14	38.72	26.74	31.10	43.26	47.5	0.00
2010	11	56.06	40.38	27.89	32.43	43.47	47.5	0.00
2010	12	57.20	43.00	28.95	34.06	44.86	47.5	0.00
2011	1	64.34	50.96	37.06	42.11	52.49	47.5	0.00
2011	2	62.44	51.61	38.02	42.96	52.06	47.5	0.00
2011	3	58.14	46.04	31.00	36.47	46.59	47.5	0.00
2011	4	61.74	43.70	29.42	34.62	47.28	47.5	0.00
2011	5	58.99	38.70	26.05	30.65	43.88	47.5	0.00
2011	6	62.27	39.59	25.98	30.93	45.57	51.1	0.00
2011	7	81.25	49.17	33.96	39.49	58.99	51.1	0.00
2011	8	82.89	48.39	33.42	38.87	59.43	51.1	0.00
2011	9	61.28	38.51	26.60	30.93	45.10	51.1	0.00
2011	10	57.60	39.64	27.38	31.84	43.87	51.1	0.00
2011	11	56.52	41.34	28.55	33.20	44.09	51.1	0.00
2011	12	57.66	44.02	29.64	34.87	45.51	51.1	0.00
2012	1	72.16	61.00	49.18	53.48	62.20	51.1	12.00

2012	2	70.24	61.67	50.16	54.35	61.77	51.1	12.00
2012	3	65.90	55.96	42.96	47.69	56.19	51.1	12.00
2012	4	69.53	53.57	41.35	45.79	56.88	51.1	12.00
2012	5	66.75	48.43	37.89	41.72	53.41	51.1	12.00
2012	6	70.07	49.35	37.82	42.01	55.11	54.8	12.00
2012	7	89.24	59.17	46.00	50.79	68.75	54.8	12.00
2012	8	90.90	58.37	45.45	50.15	69.18	54.8	12.00
2012	9	69.06	48.24	38.45	42.01	54.64	54.8	12.00
2012	10	65.35	49.40	39.25	42.94	53.41	54.8	12.00
2012	11	64.25	51.14	40.46	44.34	53.64	54.8	12.00
2012	12	65.41	53.89	41.57	46.05	55.09	54.8	12.00
2013	1	70.42	61.34	50.04	54.15	61.75	54.8	12.84
2013	2	68.56	62.01	51.03	55.02	61.35	54.8	12.84
2013	3	64.36	56.29	43.81	48.35	55.82	54.8	12.84
2013	4	67.88	53.89	42.19	46.45	56.46	54.8	12.84
2013	5	65.18	48.75	38.73	42.37	53.03	54.8	12.84
2013	6	68.40	49.67	38.66	42.66	54.68	58.4	12.84
2013	7	86.97	59.51	46.86	51.46	68.04	58.4	12.84
2013	8	88.57	58.71	46.30	50.81	68.45	58.4	12.84
2013	9	67.42	48.55	39.29	42.66	54.22	58.4	12.84
2013	10	63.83	49.71	40.09	43.59	53.04	58.4	12.84
2013	11	62.76	51.46	41.30	45.00	53.29	58.4	12.84
2013	12	63.88	54.22	42.41	46.71	54.73	58.4	12.84
2014	1	67.11	60.01	49.74	53.47	59.84	58.4	13.74
2014	2	65.35	60.66	50.70	54.32	59.47	58.4	13.74
2014	3	61.39	55.10	43.69	47.84	54.17	58.4	13.74
2014	4	64.71	52.78	42.13	46.00	54.74	58.4	13.74
2014	5	62.17	47.79	38.77	42.05	51.44	58.4	13.74
2014	6	65.20	48.68	38.70	42.33	53.01	59.0	13.74
2014	7	82.72	58.23	46.65	50.86	65.74	59.0	13.74
2014	8	84.23	57.45	46.11	50.24	66.11	59.0	13.74
2014	9	64.28	47.60	39.31	42.33	52.58	59.0	13.74
2014	10	60.89	48.73	40.09	43.23	51.48	59.0	13.74
2014	11	59.88	50.42	41.26	44.59	51.73	59.0	13.74
2014	12	60.94	53.09	42.34	46.25	53.11	59.0	13.74
2015	1	68.71	61.65	52.16	55.61	61.73	59.0	14.70
2015	2	66.91	62.33	53.16	56.50	61.36	59.0	14.70
2015	3	62.84	56.54	45.87	49.75	55.86	59.0	14.70
2015	4	66.25	54.12	44.24	47.83	56.43	59.0	14.70
2015	5	63.64	48.92	40.74	43.72	53.02	59.0	14.70
2015	6	66.75	49.85	40.67	44.01	54.63	59.6	14.70
2015	7	84.75	59.79	48.95	52.89	67.77	59.6	14.70
2015	8	86.31	58.98	48.39	52.24	68.15	59.6	14.70
2015	9	65.81	48.73	41.31	44.01	54.19	59.6	14.70
2015	10	62.32	49.90	42.12	44.95	53.06	59.6	14.70
2015	11	61.29	51.67	43.34	46.37	53.34	59.6	14.70
2015	12	62.38	54.45	44.46	48.09	54.76	59.6	14.70
2016	1	69.82	63.02	53.70	57.09	63.04	59.6	15.73
2016	2	68.00	63.71	54.72	57.99	62.66	59.6	15.73
2016	3	63.89	57.84	47.31	51.14	57.09	59.6	15.73
2016	4	67.33	55.38	45.66	49.19	57.66	59.6	15.73
2016	5	64.70	50.11	42.10	45.01	54.21	59.6	15.73
2016	6	67.84	51.05	42.03	45.31	55.83	60.2	15.73
2016	7	86.02	61.14	50.44	54.33	69.13	60.2	15.73
2016	8	87.59	60.32	49.87	53.67	69.51	60.2	15.73
2016	9	66.89	49.91	42.68	45.31	55.39	60.2	15.73

2016	10	63.37	51.10	43.50	46.27	54.25	60.2	15.73
2016	11	62.33	52.89	44.74	47.70	54.53	60.2	15.73
2016	12	63.42	55.72	45.88	49.46	55.98	60.2	15.73
2017	1	70.97	64.45	55.31	58.63	64.40	60.2	16.83
2017	2	69.13	65.15	56.34	59.54	64.02	60.2	16.83
2017	3	64.98	59.19	48.83	52.60	58.38	60.2	16.83
2017	4	68.46	56.70	47.15	50.62	58.95	60.2	16.83
2017	5	65.79	51.34	43.54	46.38	55.44	60.2	16.83
2017	6	68.97	52.29	43.47	46.68	57.09	60.8	16.83
2017	7	87.33	62.54	52.00	55.83	70.54	60.8	16.83
2017	8	88.92	61.70	51.43	55.16	70.93	60.8	16.83
2017	9	68.01	51.14	44.13	46.68	56.64	60.8	16.83
2017	10	64.45	52.35	44.96	47.65	55.50	60.8	16.83
2017	11	63.40	54.16	46.22	49.11	55.78	60.8	16.83
2017	12	64.51	57.03	47.38	50.89	57.25	60.8	16.83
2018	1	72.16	65.93	57.00	60.25	65.81	60.8	18.01
2018	2	70.30	66.64	58.05	61.17	65.44	60.8	18.01
2018	3	66.11	60.59	50.42	54.12	59.72	60.8	18.01
2018	4	69.62	58.06	48.72	52.11	60.29	60.8	18.01
2018	5	66.93	52.62	45.06	47.81	56.74	60.8	18.01
2018	6	70.14	53.59	44.98	48.11	58.40	61.4	18.01
2018	7	88.69	63.99	53.64	57.41	72.01	61.4	18.01
2018	8	90.29	63.14	53.06	56.73	72.40	61.4	18.01
2018	9	69.17	52.42	45.65	48.11	57.94	61.4	18.01
2018	10	65.58	53.64	46.50	49.10	56.79	61.4	18.01
2018	11	64.51	55.49	47.77	50.58	57.09	61.4	18.01
2018	12	65.63	58.40	48.95	52.39	58.57	61.4	18.01
2019	1	73.39	67.46	58.78	61.94	67.29	61.4	19.27
2019	2	71.52	68.18	59.84	62.88	66.91	61.4	19.27
2019	3	67.28	62.04	52.10	55.72	61.12	61.4	19.27
2019	4	70.83	59.47	50.37	53.68	61.69	61.4	19.27
2019	5	68.11	53.96	46.66	49.31	58.09	61.4	19.27
2019	6	71.35	54.94	46.58	49.62	59.77	62.0	19.27
2019	7	90.08	65.49	55.37	59.05	73.54	62.0	19.27
2019	8	91.70	64.63	54.78	58.36	73.93	62.0	19.27
2019	9	70.37	53.75	47.26	49.62	59.31	62.0	19.27
2019	10	66.74	54.99	48.12	50.62	58.15	62.0	19.27
2019	11	65.67	56.87	49.41	52.12	58.45	62.0	19.27
2019	12	66.80	59.82	50.61	53.96	59.96	62.0	19.27
2020	1	74.67	69.06	60.65	63.71	68.83	62.0	20.62
2020	2	72.78	69.79	61.73	64.66	68.45	62.0	20.62
2020	3	68.50	63.56	53.87	57.39	62.58	62.0	20.62
2020	4	72.08	60.95	52.12	55.33	63.15	62.0	20.62
2020	5	69.34	55.35	48.34	50.89	59.51	62.0	20.62
2020	6	72.61	56.35	48.26	51.20	61.20	62.6	20.62
2020	7	91.53	67.06	57.19	60.78	75.14	62.6	20.62
2020	8	93.17	66.19	56.59	60.08	75.53	62.6	20.62
2020	9	71.62	55.14	48.96	51.20	60.74	62.6	20.62
2020	10	67.96	56.40	49.83	52.22	59.57	62.6	20.62
2020	11	66.87	58.30	51.14	53.75	59.88	62.6	20.62
2020	12	68.01	61.30	52.35	55.61	61.40	62.6	20.62
2021	1	76.00	70.71	62.62	65.56	70.44	62.6	22.06
2021	2	74.09	71.46	63.71	66.53	70.06	62.6	22.06
2021	3	69.76	65.13	55.74	59.15	64.11	62.6	22.06
2021	4	73.38	62.48	53.95	57.06	64.68	62.6	22.06
2021	5	70.61	56.80	50.13	52.55	60.99	62.6	22.06

2021	6	73.92	57.81	50.04	52.87	62.70	63.2	22.06
2021	7	93.02	68.69	59.11	62.59	76.80	63.2	22.06
2021	8	94.68	67.80	58.49	61.88	77.20	63.2	22.06
2021	9	72.92	56.59	50.75	52.87	62.23	63.2	22.06
2021	10	69.22	57.87	51.63	53.90	61.05	63.2	22.06
2021	11	68.12	59.80	52.97	55.45	61.37	63.2	22.06
2021	12	69.27	62.84	54.20	57.34	62.91	63.2	22.06
2022	1	77.38	72.44	64.69	67.51	72.12	63.2	23.61
2022	2	75.45	73.19	65.80	68.49	71.74	63.2	23.61
2022	3	71.08	66.77	57.70	61.00	65.71	63.2	23.61
2022	4	74.73	64.09	55.89	58.87	66.28	63.2	23.61
2022	5	71.94	58.31	52.01	54.30	62.54	63.2	23.61
2022	6	75.27	59.35	51.93	54.62	64.27	63.9	23.61
2022	7	94.57	70.38	61.12	64.49	78.54	63.9	23.61
2022	8	96.24	69.48	60.50	63.77	78.93	63.9	23.61
2022	9	74.26	58.10	52.64	54.62	63.80	63.9	23.61
2022	10	70.53	59.40	53.54	55.67	62.61	63.9	23.61
2022	11	69.42	61.36	54.89	57.24	62.93	63.9	23.61
2022	12	70.59	64.45	56.14	59.16	64.50	63.9	23.61
2023	1	78.81	74.23	66.87	69.55	73.87	63.9	25.26
2023	2	76.86	75.00	67.99	70.54	73.49	63.9	25.26
2023	3	72.45	68.48	59.78	62.94	67.38	63.9	25.26
2023	4	76.14	65.75	57.94	60.78	67.95	63.9	25.26
2023	5	73.32	59.90	54.00	56.14	64.16	63.9	25.26
2023	6	76.69	60.94	53.91	56.47	65.91	64.5	25.26
2023	7	96.18	72.14	63.25	66.48	80.35	64.5	25.26
2023	8	97.86	71.23	62.62	65.75	80.75	64.5	25.26
2023	9	75.67	59.68	54.64	56.47	65.43	64.5	25.26
2023	10	71.89	61.00	55.55	57.53	64.24	64.5	25.26
2023	11	70.77	62.99	56.92	59.13	64.57	64.5	25.26
2023	12	71.95	66.12	58.19	61.08	66.15	64.5	25.26
2024	1	80.30	76.10	69.17	71.69	75.71	64.5	27.03
2024	2	78.33	76.88	70.31	72.70	75.33	64.5	27.03
2024	3	73.87	70.26	61.97	64.99	69.14	64.5	27.03
2024	4	77.60	67.50	60.11	62.79	69.71	64.5	27.03
2024	5	74.75	61.55	56.10	58.08	65.87	64.5	27.03
2024	6	78.16	62.61	56.02	58.42	67.63	65.2	27.03
2024	7	97.84	73.98	65.49	68.58	82.25	65.2	27.03
2024	8	99.55	73.05	64.85	67.84	82.64	65.2	27.03
2024	9	77.12	61.33	56.75	58.42	67.15	65.2	27.03
2024	10	73.31	62.67	57.68	59.49	65.95	65.2	27.03
2024	11	72.18	64.69	59.07	61.11	66.28	65.2	27.03
2024	12	73.37	67.87	60.36	63.09	67.89	65.2	27.03
2025	1	81.85	78.05	71.59	73.94	77.63	65.2	28.92
2025	2	79.86	78.84	72.75	74.96	77.25	65.2	28.92
2025	3	75.36	72.12	64.28	67.14	70.98	65.2	28.92
2025	4	79.13	69.31	62.39	64.91	71.55	65.2	28.92
2025	5	76.25	63.28	58.33	60.13	67.66	65.2	28.92
2025	6	79.69	64.36	58.24	60.47	69.44	65.8	28.92
2025	7	99.57	75.90	67.86	70.78	84.23	65.8	28.92
2025	8	101.29	74.96	67.21	70.03	84.63	65.8	28.92
2025	9	78.64	63.05	58.99	60.47	68.96	65.8	28.92
2025	10	74.80	64.41	59.93	61.56	67.74	65.8	28.92
2025	11	73.66	66.46	61.34	63.20	68.09	65.8	28.92
2025	12	74.86	69.69	62.65	65.21	69.71	65.8	28.92
2026	1	83.47	80.08	74.14	76.30	79.65	65.8	30.94

2026	2	81.46	80.88	75.32	77.34	79.26	65.8	30.94
2026	3	76.91	74.07	66.73	69.40	72.91	65.8	30.94
2026	4	80.72	71.21	64.81	67.14	73.48	65.8	30.94
2026	5	77.81	65.09	60.69	62.29	69.54	65.8	30.94
2026	6	81.28	66.18	60.60	62.63	71.34	66.5	30.94
2026	7	101.36	77.89	70.36	73.10	86.30	66.5	30.94
2026	8	103.10	76.94	69.70	72.33	86.70	66.5	30.94
2026	9	80.23	64.86	61.36	62.63	70.85	66.5	30.94
2026	10	76.34	66.24	62.31	63.74	69.62	66.5	30.94
2026	11	75.19	68.32	63.75	65.41	69.98	66.5	30.94
2026	12	76.40	71.60	65.07	67.44	71.63	66.5	30.94
2027	1	85.16	82.20	76.84	78.79	81.76	66.5	33.11
2027	2	83.12	83.01	78.04	79.85	81.38	66.5	33.11
2027	3	78.53	76.09	69.32	71.78	74.93	66.5	33.11
2027	4	82.38	73.20	67.37	69.49	75.51	66.5	33.11
2027	5	79.44	66.98	63.18	64.56	71.51	66.5	33.11
2027	6	82.94	68.09	63.09	64.91	73.33	67.1	33.11
2027	7	103.23	79.98	73.00	75.54	88.47	67.1	33.11
2027	8	104.98	79.01	72.33	74.76	88.87	67.1	33.11
2027	9	81.88	66.75	63.86	64.91	72.84	67.1	33.11
2027	10	77.95	68.15	64.83	66.04	71.60	67.1	33.11
2027	11	76.79	70.26	66.29	67.73	71.96	67.1	33.11
2027	12	78.02	73.59	67.63	69.80	73.64	67.1	33.11